

Translation

PATENT COOPERATION TREATY

PCT

PCT/EP2002/013534



INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference OHO-1341-02	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2002/013534	International filing date (day/month/year) 30 November 2002 (30.11.2002)	Priority date (day/month/year) 08 March 2002 (08.03.2002)
International Patent Classification (IPC) or national classification and IPC A61M 11/00		
Applicant MEDIFANT MANAGEMENT GMBH		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 9 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 17 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☒ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 08 October 2003 (08.10.2003)	Date of completion of this report 14 May 2004 (14.05.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Application No.  
PCT/EP2002/013534

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed
- ☒ the description:  
 pages \_\_\_\_\_ 11-20 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_ 1-10 \_\_\_\_\_, filed with the letter of \_\_\_\_\_ 02 February 2004 (02.02.2004)
- ☒ the claims:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_ 1-36 \_\_\_\_\_, filed with the letter of \_\_\_\_\_ 02 February 2004 (02.02.2004)
- ☒ the drawings:  
 pages \_\_\_\_\_ 1/4-4/4 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Application No.

PCT/EP 2002/013534

## IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.
- ☐ paid additional fees.
- ☐ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.
- ☒ not complied with for the following reasons:

SEE ATTACHED SHEET

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☒ all parts.
- ☐ the parts relating to claims Nos. \_\_\_\_\_

**Supplemental Box**  
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV.3

This Authority has established that, owing to the unclear dependency of claims 3 and 7 (it is not clear whether "in particular according to one of the previous claims" restricts the subject matter of the claims or not), the international application contains several (groups of) inventions that are not linked by a single general inventive concept (PCT Rule 13.1), namely:

Group 1: claims 1-2, 8-36

Device for administering substances, with:

- A) receiving unit
- B) discharge unit with discharge opening
- C) alternative outer shape
- D) first/second insert (simplifying exchange of the substance / cleaning of the device).

Group 2: claims 3-4, 7, 8-36

Subgroup 2.1: claims 3-4, 8-36

Device for administering substances with:

- A) receiving unit
- B) discharge unit with discharge opening
- C) alternative outer shape
- E) first/second sealing unit (prevents substance from escaping).

Subgroup 2.2: claims 7, 8-36:

Device for administering substances with

- A) receiving unit
- B) discharge unit with discharge opening
- C) alternative outer shape
- F) upwardly running hollow line (prevents substance

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV.3

from escaping).

The same or corresponding features of claims 1, 3, and 7 are receiving unit A), discharge unit with discharge opening B), and alternative outer shape C), which are disclosed in the search report citations (see Box V) and therefore not only do not involve an inventive step, but are not novel either.

The additional features of claims 1 (group 1) and 3 and 7 (group 2) are substantially different and relate to different subjects. The description (as submitted on 2 February 2004) supports this division into several aspects of the invention.

Consequently, the application comprises two inventions and therefore does not meet the requirements of PCT Rule 13.1.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/EP 3534

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	1-36	YES
	Claims		NO
Inventive step (IS)	Claims	1-36	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-36	YES
	Claims		NO

### 2. Citations and explanations

#### Group 1: Claim 1

Document DE-U-8612862 is considered the prior art closest to the subject matter of claim 1 and discloses (the references between parentheses relate to said document):

Device (1) for administering fluids to an individual, with a receiving unit (3, 4) for receiving the substance that is to be administered and a discharge unit (7) that is connected to the receiving unit and has a discharge opening (8) for discharging the substance to the individual, the device (1) having an outer shape that is not directly functionally related to the administration and corresponds to that of an animal (see figure 1), it being possible to fill an insert (9, 5) that can be inserted into the receiving unit and via which the substance reaches the discharge opening (8).

The subject matter of claim 1 differs therefore from this known device in that the substance reaches the discharge opening from a first insert via a second insert. The two inserts can be connected in a nonpositive and detachable manner.

The subject matter of claim 1 is therefore novel (PCT Article 33(2)).

The problem addressed by the present invention group can therefore be considered that of making the device easier to refill.

The solution to this problem proposed in claim 1 of the present application involves an inventive step for the following reasons (PCT Article 33(3)):

The insertable first insert makes the insert easier to fill with the substance that is to be administered or a container that contains the substance. The second insertable insert makes the insert containing the substance easier to connect to the discharge opening.

None of the search report citations discloses these features for the same solution. Claim 1 therefore involves an inventive step (PCT Article 33(3)).

#### Group 2: Claim 3

Document WO-A-9626755 is considered the prior art closest to the subject matter of claim 1 and discloses (the references between parentheses relate to said document):

Device (10) for administering fluids or powder-like substances to an individual, with a receiving unit (2) for receiving the substance that is to be administered and a discharge unit that is connected to the receiving unit and has a discharge opening for discharging the substance to the individual (see 5), the device (10) having at least in regions an outer shape (3) that is not directly functionally

related to the administration, a first sealing unit (1) for sealing the receiving unit and a second sealing unit (5) for sealing the discharge unit being provided.

The subject matter of claim 3 differs therefore from this known device in that the two sealing units reversibly seal the receiving unit and the discharge unit.

The subject matter of claim 3 is therefore novel (PCT Article 33(2)).

The problem addressed by the present invention group can therefore be considered that of preventing the substance from escaping.

The solution to this problem proposed in claim 3 of the present application involves an inventive step for the following reasons (PCT Article 33(3)):

The invention enables the receiving unit and the discharge unit of the device to be sealed and opened. The search report citations disclose a comparable feature only when the receiving unit and the discharge unit are the same opening. The prior art prefers to use the receiving unit only once.

Claim 3 therefore involves an inventive step (PCT Article 33(3)).

Group 2: claim 7

Document DE-U-8612862 is considered the prior art closest to the subject matter of claim 7 and discloses (the references between parentheses relate to said document):



Device (1) for administering fluids to an individual, with a receiving unit (3, 4) for receiving the substance that is to be administered and a discharge unit (7) that is connected to the receiving unit and has a discharge opening (8) for discharging the substance to the individual, the device (1) having an outer shape that is not directly functionally related to the administration and corresponds to that of an animal (see figure 1), the discharge unit comprising a hollow line (5) which connects the receiving unit (3, 4) and the discharge opening (8) to one another, and the hollow line (5) running upwards in sections towards the discharge opening when the device is placed on a horizontal surface.

The subject matter of claim 7 differs therefore from this known device in that the course of the hollow line prevents any residual liquid from escaping from the device.

The subject matter of claim 7 is therefore novel (PCT Article 33(2)).

The feature proposed in claim 7 of the present application involves an inventive step for the following reasons (PCT Article 33(3)):

Document DE-U-8612862 discloses these features by chance in figure 3: the upward course of the hollow line in the section disclosed has no effect on the escaping of any residual liquid because the hollow line continues to run underneath (see also figure 1). None of the other search report citations

mentions the same feature for the same purpose.

Claim 1 therefore involves an inventive step (PCT Article 33(3)).

The subject matter of claims 1, 3 and 7 is industrially applicable and therefore meets the requirements of PCT Article 33(4).

Claims 2, 4-6 and 8-36 are dependent on claims 1, 3 or 7 and therefore likewise meet the requirements of PCT Article 33(2) to (4).

OHO-1341-02

2/2/2004

Device for Administering or for Ingesting Fluid or Powdery Substances

The invention is relative to a device for administering or for ingesting fluid or powdery substances to a person, especially medical substances and/or food to children.

The administration or receiving of fluid substances can take place in many ways. For example, for the oral administration of liquid medicines customary household spoons or measuring cups are used. These devices are of a very functional nature. In the case of bitter-tasting substances such as, e.g., cod-liver oil or medicines it is frequently difficult for the parent or the medical personnel to get the child to be supplied to take the medicine. Even medicines or injections in gaseous or aerosol form have the same difficulties. An administration method that does justice to the child and is pedagogically valuable is lacking in this regard. Even the feeding of small children with, e.g., pap or other foodstuffs is often very difficult, which can have causes of various natures.

The present invention has the problem of improving with simple means the administration of fluids or powdery substances to a person, especially to children.

This problem is solved with the features of independent Claims 1 (first inventive aspect), 3 (second inventive aspect) and 7 (third inventive aspect).

The receiving unit can receive the substance either directly or indirectly. This means for the latter instance that the receiving unit can also receive an insert or a container for receiving the substance or also receive an insert for receiving a container with a substance contained in it.

Accordingly, the first inventive aspect provides that a first insert can be inserted into the receiving unit, which insert can receive the substance to be administered or a container containing the substance. Also, a second insert can be inserted into the dispensing unit through which insert the substance can pass to the dispensing opening. In these embodiments the receiving unit and the dispensing unit are preferably permanently integrated into the device whereas the first and the second inserts are replaceable and thus facilitate the managing of the device. For example, different inserts can be used for different substances to be administered. If the insert or inserts need to be cleaned, it is not absolutely necessary to clean the entire device. Even if the first and/or the second insert is/are damaged, only they need to be replaced.

The first and the second inserts are preferably connected non-positively to one another, especially by a clamp-, plug-, screw- or bayonet connection.

According to the second inventive aspect the receiving unit is designed with a first closure unit in a reversibly closable manner. The first closure unit can close in particular a receiving opening or a filling opening of the receiving unit so that in this manner the substance or an insert or container containing the substance, that is provided for being introduced into the receiving unit or into an appropriately designed insert, can not flow or fall out of the device. Likewise, the invention provides that the dispensing opening is provided with a second reversibly closable closure unit. This can effectively prevent fluid still present in the device from running out. Upon another administration the second closure unit can be removed again.

The first and/or the second closure unit are preferably designed as a cover, plug, movable closure unit or as a self-closing unit. The cover can be threaded, for example. The first or the second closure unit can alternatively be opened and/or closed by actuating a button or switch or the like. The closure unit can have a round or square form or some other suitable form. It can also be designed as a pacifier or the like.

If the cited receiving opening of the receiving unit is identical with the dispensing opening of the dispensing device, the first and the second closure units can also be identical.

It can also be provided that the first and/or the second closure unit(s) is/are integrated into the second and/or the first closure unit(s). For example, the first closure unit can be designed as a screwable cover in which, for example, a, e.g., shiftable or rotatable second closure unit is integrated for freeing and closing the dispensing opening. Such a design is known, e.g., from commercial drinking bottles for children.

Furthermore, it is advantageous if the first and/or the second closure unit or units and an insert or a container can be connected to each other, e.g., plugged in to each other, so that this combination can be introduced as an entire unit into the receiving unit or the dispensing unit. Alternatively, the first or the second dispensing unit and an insert or a container are designed in one piece.

According to the third inventive aspect the plurality of shapes for the three-dimensional outer form of the device can be expanded if the dispensing unit comprises a hollow line connecting the receiving unit and the dispensing unit to one another. For example, the hollow line can then be provided in the elephant trunk if the device of the invention has the shape of an elephant. This also includes embodiments in which the hollow line establishes a connection between an insert and/or container that can be inserted into the receiving unit and between the dispensing opening.

According to the third inventive aspect, in order to prevent residual liquid from running out of the device the hollow line is designed so that it runs upward at least in sections toward the dispensing opening when the device is placed on a horizontal surface. There is a possibility in this instance that at least the conduit section located directly in front of the dispensing opening has this upward course. It can be sufficient if this section has only a slight rise of a few degrees relative to the horizontal. When a liquid substance is used, residual amounts of the substance cannot run forward or drop out.

A device is made available by means of the combination of the at least in parts not directly functionally designed, three-dimensional design of the device with a receiving unit and a dispensing unit connected to the latter, which device is ideally suited for administering in particular pharmaceutical products in liquid, gaseous and/or powdery or aerosol form. When designing the device with a shape that is attractive in particular to children, an emotional bond of the child to the device can be achieved in that the child does not perceive the device to be particularly purposeful, that is, that it is not directly associated with the administration of the substance that might not taste very good to him, which lowers the inhibition threshold and the resistance to ingesting this substance or this food.

As an alternative to an oral administration of the substance the device can also be used for injections, e.g., insulin or vaccines. In this instance it is advantageous if an injection device is present in the vicinity of the dispensing opening for injecting the substance with a needle or by overpressure.

It is especially advantageous to design the device at least in parts to have a shape attractive for children. An example of this is a design in the form of an animal. Small children in particular feel strongly drawn to certain animal figures, e.g., elephants, bears, giraffes and monkeys. It is therefore purposeful to select a shape stemming from the animal world. In the alternative, the figure of a comic figure or of a fantasy creature can be used, e.g., a known figure such as Mickey Mouse, Donald Duck, teletubbies or the like. Shapes in the form of pieces of fruit, model cars, etc. are also possible.

A simple administration of the questionable substance is facilitated if the shape has design elements that make it easier to grasp and hold the device. In an especially preferred embodiment the extremities and/or other body parts of the animal, comic figure or fantasy creature can serve for this. E.g., when using an animal it can be grasped by two paws or on its neck area by the grownup or even by the child himself.

It is especially preferable if the dispensing opening is designed to be introduced into the mouth of the person concerned. Especially in the case of



children the direct contact with the dispensing opening can help overcome inhibition thresholds. If the lips of the child can surround the dispensing opening, on the one hand an advantageous suction reflex can be utilized and on the other hand a clean, drop-free administration is possible. For example, the dispensing opening can be designed as the trunk of an elephant or as an animal snout. However, even when designing the device of the invention for injection the dispensing opening can be formed from a body part of an animal, comic figure or fantasy creature in order to reduce the fear of the child regarding the injection.

It is especially preferred if openings for dispensing the substance on the one hand and for receiving and introducing the substance, an insert and/or a container into the receiving unit are not identical. This design facilitates the manipulation since an insert and/or a container can be introduced into the receiving unit, e.g., via a relatively wide receiving opening in a simple manner whereas the administration can take place via a narrow dispensing opening. A simpler and more precise dosing of the substance to be administered can also be achieved by an adult in this instance, as will be explained in detail further below. On the other hand the variant with identical receiving and dispensing openings is on the whole simpler to manufacture.

It is preferable if the receiving unit or the dispensing unit and especially preferable if both units are substantially not visible from the outside in order that

the functional aspect recedes far behind the visual and emotional aspect and the device tends to be viewed as a toy rather than a dispensing device.

In an advantageous embodiment of the invention the receiving unit and the dispensing unit are designed in one piece and thus are particularly easy to manufacture. Also, this prevents deposits from forming on connection points which would otherwise be present between the two units.

Alternatively, the two units are designed as independent parts that can preferably be non-positively connected to each other, especially with a clamp-, plug-, screw- or bayonet connection. Thus, given the appropriate design of the remaining device parts, the two units can be separated from one another, if necessary, and replaced either individually or at the same time, e.g., in the case of damage, excessive contamination, etc. without having to discard the entire device.

It is especially preferable if the receiving unit and the dispensing unit are connected positively and non-positively by a plastic surrounding them substantially completely (except, e.g., for openings for filling in and dispensing the substance, for inserting containers or inserts, etc.), which plastic was applied around the two units with an injection-molding method, blow-out method or rotation method. The negative for the tool corresponds with advantage to the three-dimensional shape of the device of the invention.

In an alternate variant of the invention the receiving unit, dispensing unit and the part of the device comprising the outer shape are designed altogether in one piece. In this extreme and simplest case the device of the invention can consist of only one element if possible insert and/or closures, that will be discussed further below, are disregarded. In this instance the receiving unit and the dispensing unit are formed from the inner walls of the device.

In another alternative the device is substantially designed as a hollow body into which the receiving unit and the dispensing unit are, e.g., suspended or clipped in. The hollow body can be designed, e.g., to be substantially rigid or also inflatable.

It is advantageous and preferable if the surfaces of the device coming in contact with the substance to be administered are designed to be food-resistant. Accordingly, the receiving unit, if it is provided for being directly filled with the substance, as well as the dispensing unit and/or one or several inserts for the receiving unit and/or the dispensing unit are provided at least on the appropriate contact surfaces with a food-resistant material. A suitable coating can be used for this purpose. Alternatively, solid materials can be used, e.g., glass, porcelain and/or a suitable plastic. Aluminum or high-grade steel can also be used.

However the entire device can also be manufactured from one or several of the previously cited materials.

Alternatively, the device elements not coming in contact with the substance consist of materials that are not absolutely food-resistant, e.g., appropriate plastic, cellulose, ceramic material, wood or the like; however, metals, including fine-grade steel and aluminum, can also be used. It is especially advantageous if the device part with the outer shape is substantially manufactured from these materials in as far as it does not make appreciable contact with the substance to be administered.

The device in accordance with the invention is especially preferably designed for administering liquid as well as gaseous substances. To this end the receiving unit can be closed with different closure units, in which case one closure unit can advantageously be used for dispensing liquid substances and another closure unit can advantageously be used for dispensing gaseous substances from a gas-tight container inserted in the receiving unit. Moreover, when administering a liquid, it can be placed, e.g., directly into the receiving unit or also into a replaceable insert or container, whereas the gaseous substance to be administered and located in a gas container can be introduced into an appropriately adapted insert or directly into the receiving unit.

The device of the invention preferably comprises a transport device that transports the substance to be administered to the dispensing opening upon active actuation by the user. In addition, it is necessary, especially when

administering medicine in most instances, to precisely dose the amount to be dispensed. Accordingly, there is the possibility of making an appropriate dosing with the transport device.

In an embodiment of the invention that is advantageous in this connection the transport can be realized with the aid of a pump mechanism. Such a mechanism is known, e.g., from inhaler sprays used with asthma patients.

When administering, e.g., pulpy foods the transport device can be designed as a manually operable piston that can shift in particular in the receiving unit.

An alternative pump mechanism can be realized if the walls of the receiving unit are designed to be flexible so that the substance to be administered can escape from the receiving unit via the dispensing opening upon being appropriately loaded with pressure, preferably exerted with the fingers.

In an advantageous embodiment the transport device is integrated at least partially in the first closure unit. For example, an actuating element extends past the first closure element and can be pressed down in order to administer the substance. Upon such an actuation a part of a container inserted into the receiving unit or the entire container is moved downward so that an opening that is preferably on the container bottom is freed through which, e.g., an aerosol can exit from the container and be orally applied via the dispensing opening. Various

generally known constructions can be used for such a pump mechanism. Note in this connection, e.g., the known aerosol containers for the above-mentioned ingestion of, e.g., asthma agents.

Alternatively or additionally, at least one flow regulating means arranged in the device is provided for preventing an undesired exiting of the substance from the dispensing opening. Such a flow regulating means can be opened in a preferred embodiment of the invention by pressure and/or suction so that the substance can flow in the direction of the dispensing opening. If there is no pressure or suction the flow regulating means blocks the dispensing of the substance. A suction can be applied, e.g., by introducing the dispensing opening into the mouth and by a subsequent sucking. A loading with pressure can be realized, e.g., by the above-described pump mechanism.

In a related special embodiment of the invention a flow regulating means is designed as a thin membrane that can be deflected by pressure and/or suction.

OHO-1341-02

2/2/2004

New Claims

1. A device for administering or for ingesting fluid or powdery substances (S) to a person, especially medical substances and/or food to children, with a receiving unit (2) for receiving the substance (S) to be administered and with a dispensing unit (4) connected to the receiving unit (2) which dispensing unit comprises a dispensing opening (8) for dispensing the substance (S) to the person, which device (1) has at least in parts an outer form not directly functionally related to the administration, which form corresponds to that of an animal, comic figure or a fantasy creature, characterized by a first insert (10; 110; 5) that can be inserted into the receiving unit, into which insert the substance (S) or a container (25) containing the substance can be filled or inserted, as well as by a second insert (37) that can be inserted into the dispensing unit (4) through which insert the substance (S) can pass to the dispensing opening (8), and that the first unit (35) and the second unit (37) can be connected to one another non-positively and in a detachable manner.

2. The device according to Claim 1, characterized in that the non-positive, detachable connection is a clamp-, plug-, screw- or bayonet connection.

3. A device for administering or for ingesting fluid or powdery substances (S) to a person, especially medical substances and/or food to children, especially according to one of the previous claims, with a receiving unit (2) for receiving the substance (S) to be administered and with a dispensing unit (4) connected to the receiving unit (2) which dispensing unit comprises a dispensing opening (8) for dispensing the substance (S) to the person, which device (1) has at least in parts an outer form not directly functionally related to the administration, which form corresponds to that of an animal, comic figure or a fantasy creature, in which a first closure unit (7; 70; 170; 270) that can close the receiving opening (2) and in which a second closure unit (5) that can close the dispensing opening (8) are provided, characterized in that the first and the second closure units (7; 70; 170; 270; 5) are designed to reversibly close the receiving unit (2) respectively the dispensing opening (8).

4. The device according to Claim 3, characterized in that the first and/or the second closure unit(s) (7; 70; 170; 270; 5) is/are designed as a cover, plug, movable closure unit or as a self-closing unit.



5. The device according to Claim 3 or 4, characterized in that the first respectively the second closure unit (7; 70; 170; 270; 5) is integrated into the second respectively the first closure unit (5, 7).

6. The device according to one of Claims 3 to 5, characterized in that the first and/or the second closure unit(s) (7; 70; 170; 270; 5) and an insert (11) or a container are designed to be able to be connected to each other or in one piece.

7. A device for administering or for ingesting fluid or powdery substances (S) to a person, especially medical substances and/or food to children, especially according to one of the previous claims, with a receiving unit (2) for receiving the substance (S) to be administered and with a dispensing unit (4) connected to the receiving unit (2) which dispensing unit comprises a dispensing opening (8) for dispensing the substance (S) to the person, which device (1) has at least in parts an outer form not directly functionally related to the administration, which form corresponds to that of an animal, comic figure or a fantasy creature, characterized in that the dispensing unit (4) comprises a hollow line (9) that connects the receiving unit (2) and the dispensing opening (2) to one another, and that in order to prevent residual liquid from running out of the device (1) the hollow line (9) runs upward at least in sections toward the dispensing opening (8) when the device (1) is placed on a horizontal surface.

8. The device according to one of the preceding claims, characterized in that extremities and/or other body parts of the animal, comic figure or fantasy creature are provided by means of which the device can be readily grasped and held fast.

9. The device according to one of the preceding claims, characterized in that the dispensing opening (8) is a part of the animal, comic figure or fantasy creature.

10. The device according to one of the preceding claims, characterized in that the dispensing opening (8) is designed to be introduced into the mouth (M) of the person, whose lips preferably surround the dispensing opening (8).

11. The device according to one of the preceding claims, characterized in that the dispensing opening (8) of the dispensing unit (4) and a receiving opening (6) of the receiving unit (2) for introducing the substance (S), an insert (10; 110; 35) and/or a container (25) into the receiving unit (2) are not identical.

12. The device according to one of the preceding claims, characterized in that the receiving unit (2) and/or the dispensing unit (4) are arranged in the device in such a manner that they are substantially not visible from the outside.

13. The device according to one of the preceding claims, characterized in that the receiving unit (2) and the dispensing unit (4) are designed in one piece.

14. The device according to Claim 13, characterized in that the receiving unit (2) the dispensing unit (4) and the part of the device comprising the outer shape are designed in one piece.

15. The device according to one of Claims 1 to 12, characterized in that the receiving unit (2) and the dispensing unit (4) are designed as independent parts.

16. The device according to Claim 15, characterized in that the receiving unit (2) and the dispensing unit (4) can be non-positively connected to one another, especially by a clamp-, plug-, screw- or bayonet connection.

17. The device according to Claim 13 or 15, characterized in that the receiving unit (2) and the dispensing unit (4) are connected positively and non-positively by a plastic substantially surrounding them, preferably using an injection-molding method, blow-out method or rotation method.

18. The device according to one of the preceding claims, characterized in that the surfaces of the device coming in contact with the substance (S) consist of a food-resistant material.

19. The device according to one of the preceding claims, characterized in that the receiving unit (2), the dispensing unit (4) and/or one or several inserts (10; 110; 35; 37) for the receiving unit (2) and/or the dispensing unit (4) are

manufactured from one of the following materials: glass, porcelain, aluminum, high-grade steel or plastic.

20. The device according to one of the preceding claims, characterized in that the part of the device comprising the outer shape is manufactured substantially from one of the following materials: plastic, cellulose, ceramic material, wood, fine-grade steel or aluminum.

21. The device according to one of the preceding claims, characterized in that it is designed in such a manner that liquid as well as gaseous substances (S) housed in a closed container (25) can be administered.

22. The device according to one of the preceding claims, characterized in that the receiving unit (2) can be closed with different closure units, in which case one closure unit (170; 270) can be used for dispensing liquid substances and another closure unit (70) can be used for dispensing gaseous substances (S) from an insert (110; 35) or container (25) inserted in the receiving unit (2).

23. The device according to one of the preceding claims, characterized by a transport device (20; 220) that transports the substance (S) from the receiving unit (2), an insert (110; 35) and/or the container (25) to the dispensing opening (8).

ART 34 AMDT

24. The device according to Claim 23, characterized in that the transport device (20; 220) comprises a pump mechanism, especially one including a stamp (24) or a piston (224).

25. The device according to Claim 3 as well as to Claim 23 or 24, characterized in that the transport device (20; 220) is integrated at least partially into the first or the second closure unit (7; 70; 170; 270; 5).

26. The device according to one of Claims 23 to 25, characterized in that the transport device (20; 220) can be coupled to a container (25) or insert (110; 35) introduced into the receiving unit (2) in order to administer the substance from the container (25) or insert (110; 35) upon actuation of the transport device (20; 220) via a flowthrough opening (12; 112) freed thereupon as well as subsequently via the dispensing opening (8).

27. The device according to one of Claims 23 to 26, characterized in that the walls of the receiving unit (2) are elastic in order to be able to transport the substance (S) at least partially to the dispensing opening (8) by compression.

28. The device according to one of the preceding claims, characterized by flow regulating agents (30; 27; 128) arranged in the device and for preventing an undesired exiting of the substance from the dispensing opening (8).

29. The device according to Claim 28, characterized in that the flow regulating agents (30) open by pressure and/or suction in the direction of the dispensing of substance.

30. The device according to Claim 28 or 29, characterized in that a flow regulating agent (30) is designed as a thin membrane that can be deflected by pressure and/or suction and that is preferably arranged in the hollow line (9) in accordance with Claim 6.

31. The device according to Claim 28 or 29, characterized in that a flow regulating agent (30; 27; 128) is formed by a valve (27; 128) that is opened by manual actuation.

32. The device according to one of the preceding claims, characterized by sealing means (32) for purposefully conducting the substance to be administered from an insert (10; 110) or a container (25) to the dispensing opening (8).

33. The device according to Claim 32, characterized in that the sealing means (32) are designed as O-rings resting on the one hand on the inner wall of the receiving unit (2) and on the other hand on the outer wall of an insert (10; 110) or of a container (25).

34. The device according to one of the preceding claims, characterized in that the receiving unit (2) or an insert (10; 110; 35) or container inserted in it can

be filled from above with the substance (S) when the device (1) is set on a horizontal surface.

35. The device according to one of the preceding claims, characterized by an injection device in the area of the dispensing opening (8) for injecting the substance (S) with a needle or by overpressure.

36. The device according to one of the preceding claims, characterized in that it can be reused and is washing-machine-resistant.